MiGS
VPC Batch Loader R2.0

User Manual

Version 1.0

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Summary of Changes

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Date	Description	By
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1 Using this Manual

This section contains information that helps you understand and use the information contained in this manual.

Purpose

The MiGS VPC Batch Loader is an application facilitating the batched processing of credit card transactions.

This MiGS VPC Batch Loader R2.0 User Manual helps end users to understand the installation and operational requirements of the Batch Loader application.

Audience

MiGS provides this manual for merchants and their authorized agents. Specifically, the following personnel should find this manual useful:

- Business owners responsible for delivery of the application
- Technical support personnel
- End users of the application.

Related Documents

This document is intended to be used with reference to various other documents detailing systems that this application depends upon. The reader is advised to consult the following documents to gain an in-depth understanding of the application:

Document Name	Provider
Merchant Administration User Manual	MiGS

Other Software Dependencies

The Batch Loader depends upon the following 3rd party software:

Software	Version	URL
Java Runtime Environment OR Java Development Kit	SUN JRE 1.5.0 OR SUN J2SE 1.5.0 SDK	http://java.sun.com/j2se/1.5.0/

Furthermore, the application requires connectivity to the internet in order to send transactions to the Payment Server.

2 Essential Knowledge

This section contains background information that the reader is expected to understand prior to installing and operating the application.

Distribution

The Batch Loader installation package is distributed to merchants who have signed onto the MiGS service, and have a specific requirement for the batched processing of transactions.

NOTE: the Batch Loader installation package must NOT be redistributed without the prior consent of MiGS.

Functional Overview

The following diagram depicts the communication between the Batch Loader and various components of the MiGS service:

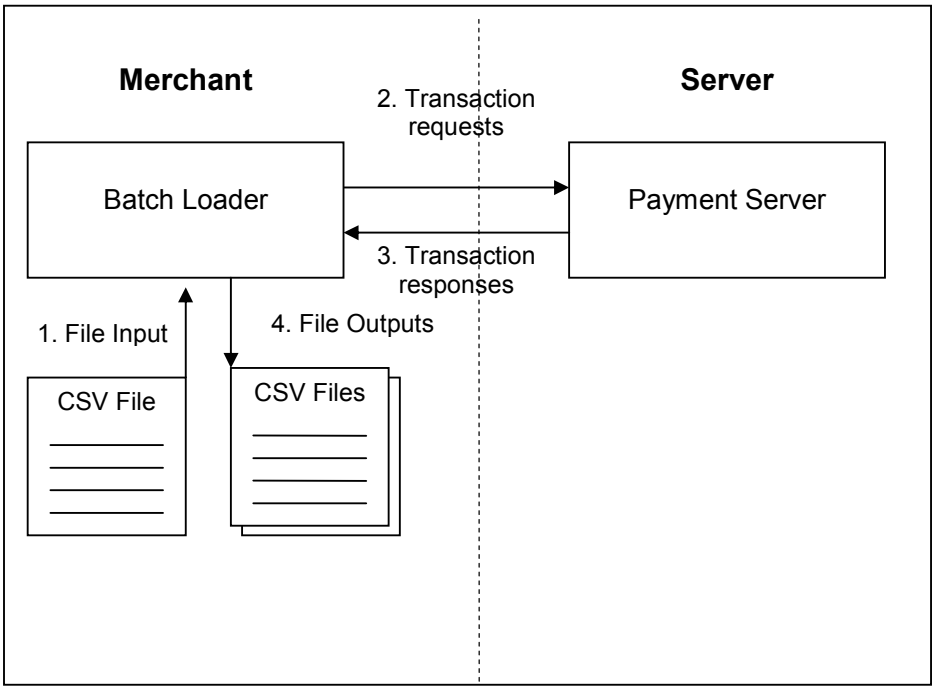

Figure 1 - Communication between the Batch Loader and the Server

As the Batch Loader communicates with the server via the Virtual Payment Client, the Batch Loader must only use Merchant IDs linked to the Access Code in the configuration file.

Pre-requisites

SUN JRE/JDK must be installed prior to the installation of the Batch Loader. Please refer to the “Related Documents” and “

Other Software Dependencies" for further information on obtaining and installing this software.

Furthermore, a valid Merchant ID must be active on the MiGS service, with the following "Global Permissions" enabled:

- May Use Virtual Payment Client
- MOTO

Refunds processing requires an Advanced Merchant Administration username and password.

Two-Step Manual Processing Cycle

VITAL INFORMATION: Merchants operating the Batch Loader application manually must process transactions in a two step process:

1. **Validate Only Cycle** – this process pre-screens the input file for commonly known errors, and outputs information on which transactions are correctly formatted, and which transactions will definitely fail. In the **Validate Only Cycle**, no transactions will be sent to the Payment Server. This allows the merchant to correct formatting errors. Once the user is happy with a validated input file, they may proceed to the next step.

   NOTE: the application defaults with the ***validate only*** option enabled, however the user may manually skip this step. Validation is highly recommended to reduce rework on failed transactions.

2. **Processing Cycle** – this process will send transactions to the Payment Server. Any transactions that had failed validation, but had not been corrected, will not be sent to the server.

NOTE: in-depth information on using the application will be detailed in the section "Using the Batch Loader".

Automatic Processing Cycle

Automatic Processing will be covered in the **Advanced Section** of this manual.

Input and Output File Format

The Batch Loader application processes transaction commands from comma separated value (CSV) input files. Likewise, it outputs results to CSV output files.

Input and Output File Locations

The Batch Loader application picks up input files from the following subdirectory:

`<BATCHHOME>\batchin` (by default)

and generates output files in:

`<BATCHHOME>\batchout` (enforced)

where <BATCHHOME> is the directory in which the application has been installed. The user may select input files from other directories, however the output files will always be generated in the "batchout" directory.

Validate Only Cycle

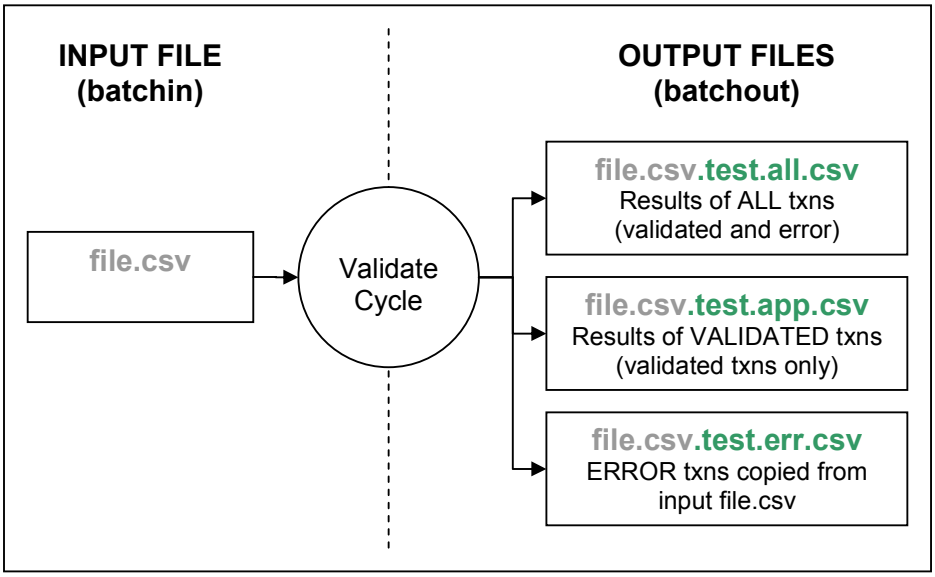

Figure 2 - Input and Output File Format - Validate Only

In the **Validate Only Cycle**, users can validate the file, make any adjustments necessary, and validate the file again. There is no limit on the number of times a file can be validated.

NOTE: the output filenames are prefixed with the input filename. This is to allow easy identification of results.

Processing Cycle

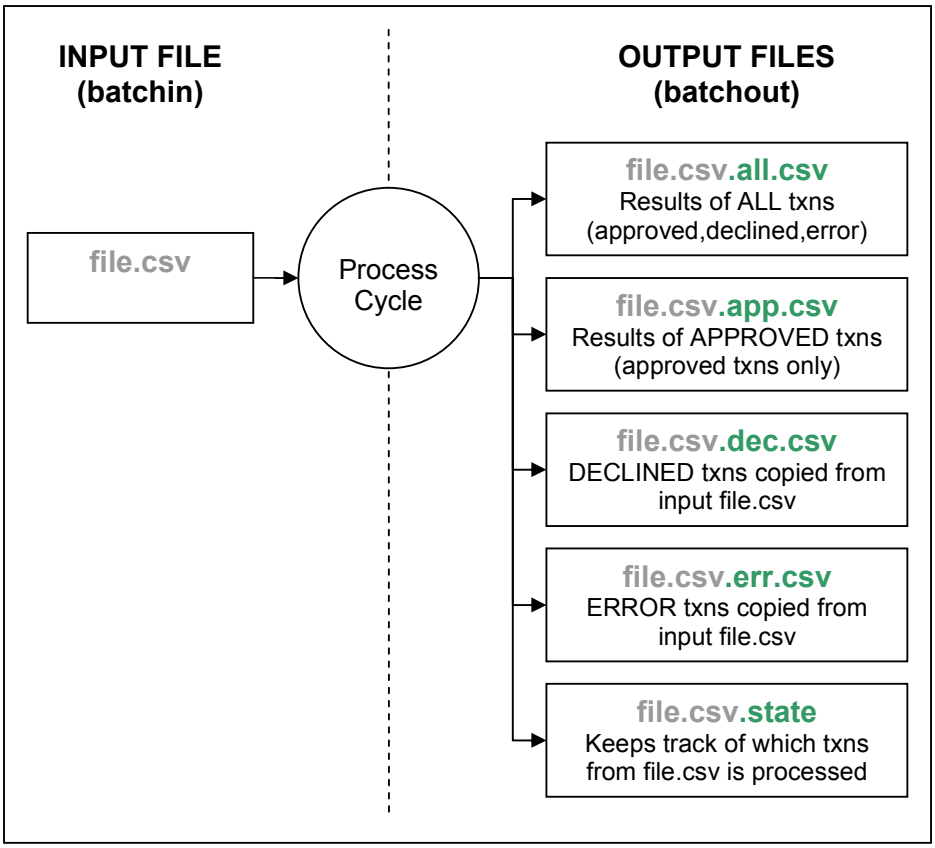

Figure 3 - Input and Output File Format - Processing Cycle

In the **Processing Cycle**, the file.csv.state file is used to keep track of which lines in the input file.csv has been processed. Should the process be interrupted, processed transactions will not be sent again. The program will resume at the first unprocessed transaction.

NOTE: the application keeps track of results and processed transactions via the unique filename. Once the **Processing Cycle** has been initiated, **the user MUST NOT CHANGE/DELETE the filenames or contents of the files illustrated above**.

The declined file.csv.dec.csv and error file.csv.err.csv files contain declined and error transactions exactly as they appear in the input file. The user can make a copy of these files, make any corrections necessary, and re-process these failed transactions. **NOTE:** it is recommended that the user does not change the declined and error output files, but rather make a different copy for reprocessing. The user can copy these files to the input directory and make modifications there.

3 Configuration

This section contains information on the general configuration of the Batch Loader.

The BATCHLOADER.properties Configuration File

By default, the Batch Loader installation application is installed in the following directory:

```
C:\Dialect\BatchLoader
```

If the Batch Loader has been installed to a different directory, the following error message will appear when attempting to run the Batch Loader application:

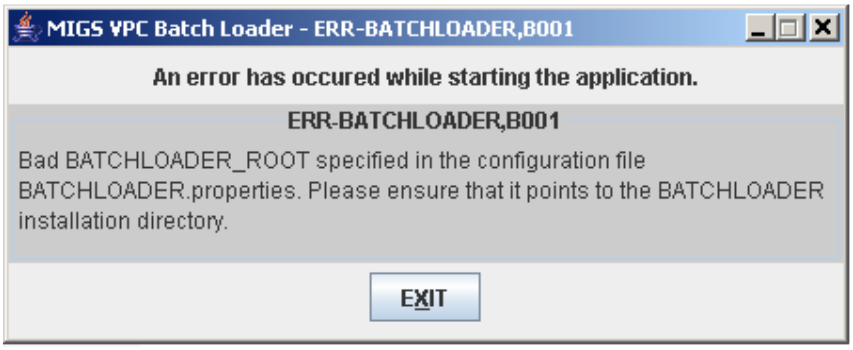
MIGS VPC Batch Loader - ERR-BATCHLOADER,B001
An error has occured while starting the application.
ERR-BATCHLOADER,B001
Bad BATCHLOADER_ROOT specified in the configuration file BATCHLOADER.properties. Please ensure that it points to the BATCHLOADER installation directory.
EXIT

Figure 4 - ERR-BATCHLOADER,B001 - Bad BATCHLOADER_ROOT

If the message above appears, the following configuration file will need to be modified (otherwise skip this section on "The BATCHLOADER.properties Configuration File"):

```
<BATCHHOME>\classes\BATCHLOADER.properties
```

The default `BATCHLOADER_ROOT=` setting points to the Batch Loader installation directory:

```
BATCHLOADER_ROOT=\\MiGS\\BatchLoader
```

The setting will need to be changed to reflect the correct installation directory. **NOTE:** directory separators require double backslashes `\\` and there is no `\\` at the end of the setting.

For detailed information on the settings configurable in the BATCHLOADER.properties configuration file, please refer to Appendix A.

4 Using the Batch Loader

This section contains information on the operation of the Batch Loader application.

The Validate Only Cycle

Once the Batch Loader has been successfully started, the main "Loader" screen will be displayed.

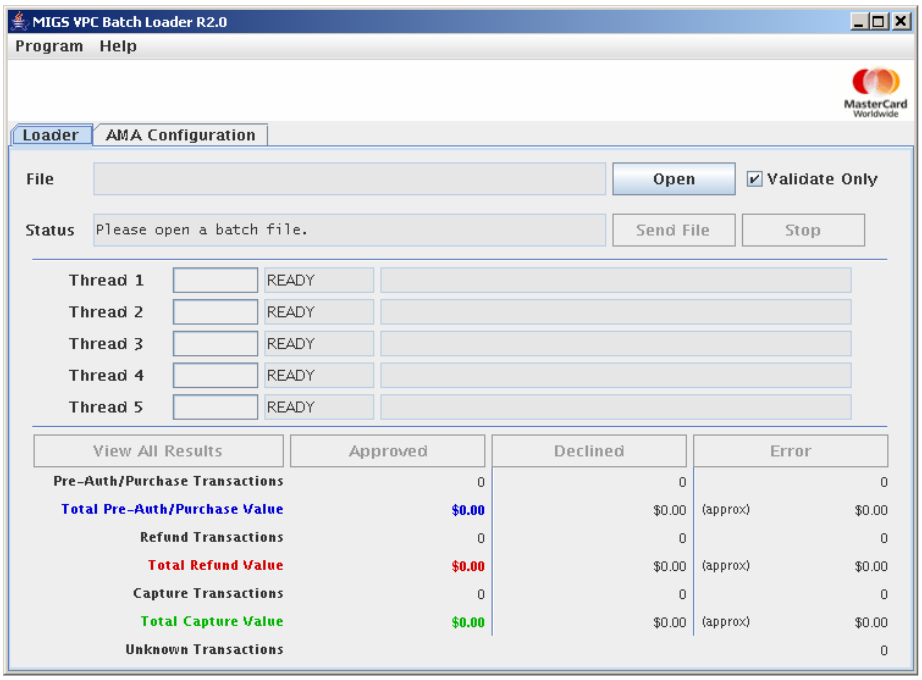

Figure 5 – Batch Loader - The Main Loader Screen

The main "Loader" screen is the interface through which the user will carry out the batch processing task. Notice that the "Batch File" field is currently blank, and that the "Load" button is disabled.

1. Batch File Input Directory

Batch files should be placed in the following directory:

`<BATCHHOME>\batchin`

This will allow the application to easily locate the batch files to be processed. Although it is not mandatory for batch files to be placed in this directory, it is highly recommended so that the user can keep track of all their files.

NOTE: batch files must have a unique filename. As detailed in the section “Input and Output File Locations”, the application keeps results and status information according to the input filename.

2. Opening a Batch File

To select a batch file, click on the **Open** button from the “Main Loader” screen. An example batch file is included in the installation package. Select the batch file and click the **Open** button.

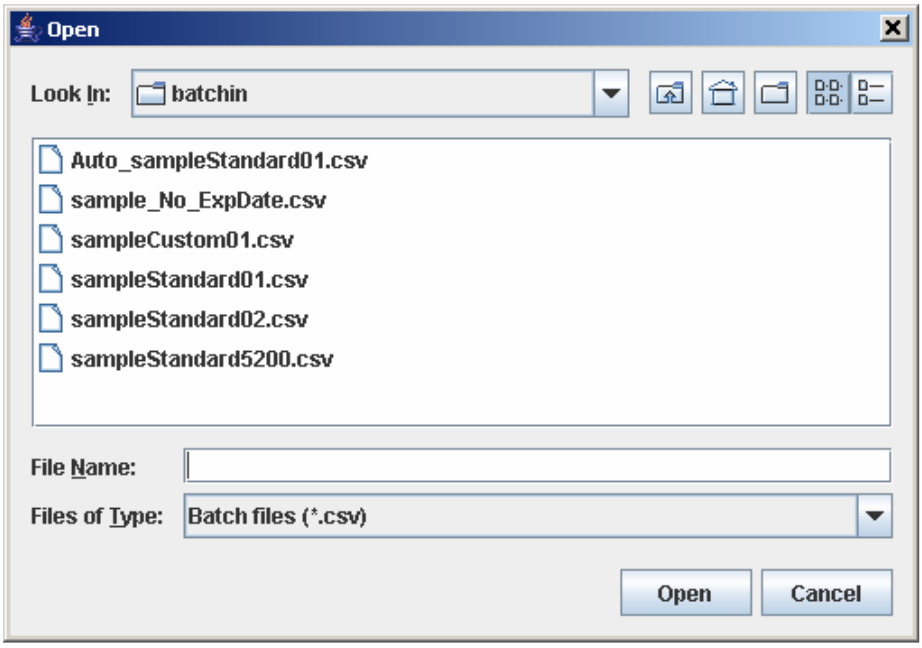

Figure 6 - “Validate Only” Cycle - Opening a Batch File

3. Ensuring that “Validate Only” is Checked

By default, the **Validate Only** checkbox is ticked when a batch file is selected. Because this option is selected, no transactions will be sent to the server; transactions in the batch file will be checked for common formatting errors.

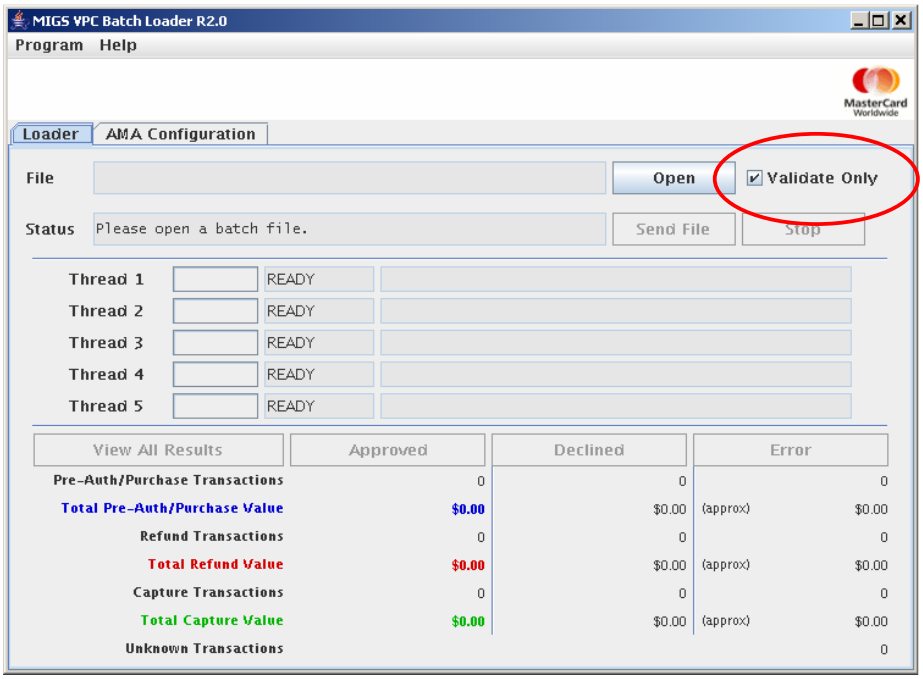

Figure 7 - “Validate Only” Cycle - Validate Only Option

Notice that the “Batch File” field will display the filename of the selected batch file. Once a batch file has been selected, the “Load” button is enabled as illustrated above.

4. Starting the “Validate Only” Cycle

The validation can be started via the **Send File** button.

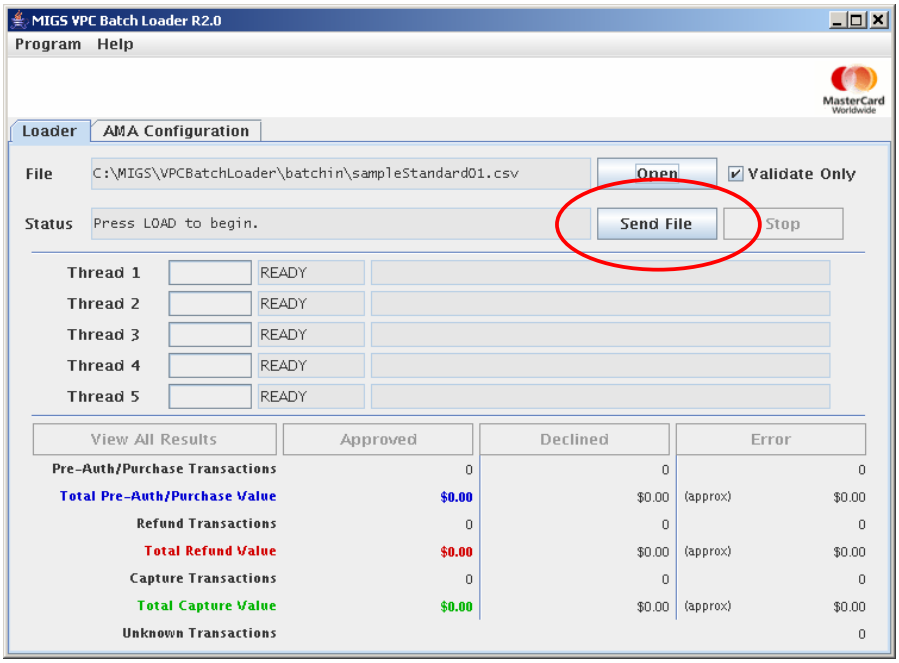

Figure 8 - "Validate Only" Cycle - Starting Validation

The progress will be displayed while validation is taking place.

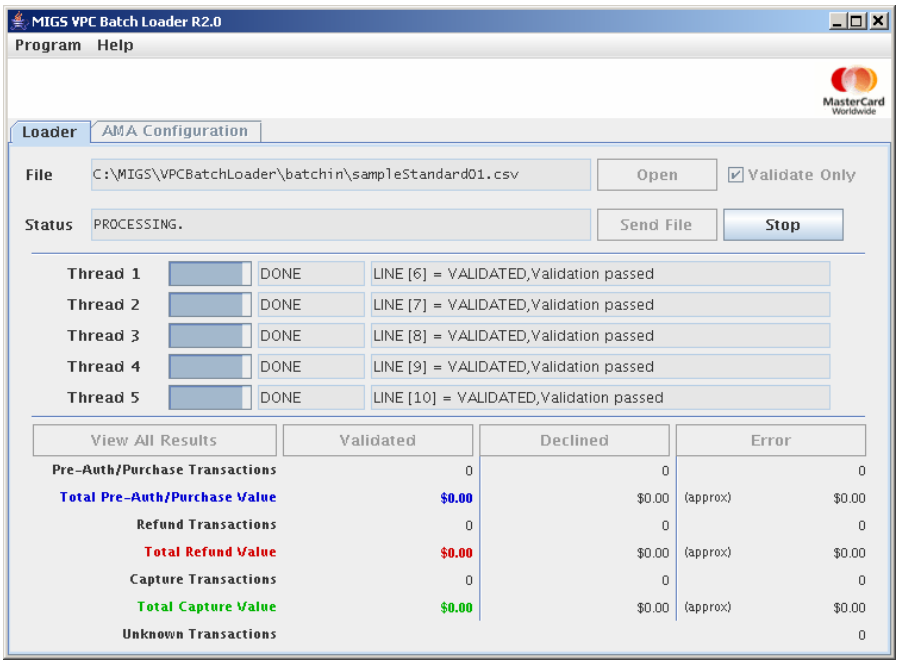

Figure 9 - “Validate Only” Cycle - Validating

5. Checking the Results from the "Validate Only" Cycle

Please wait while the application performs validation. Once it is complete, the application will display "FINISHED" in the "Status" field. Several results buttons will also be enabled.

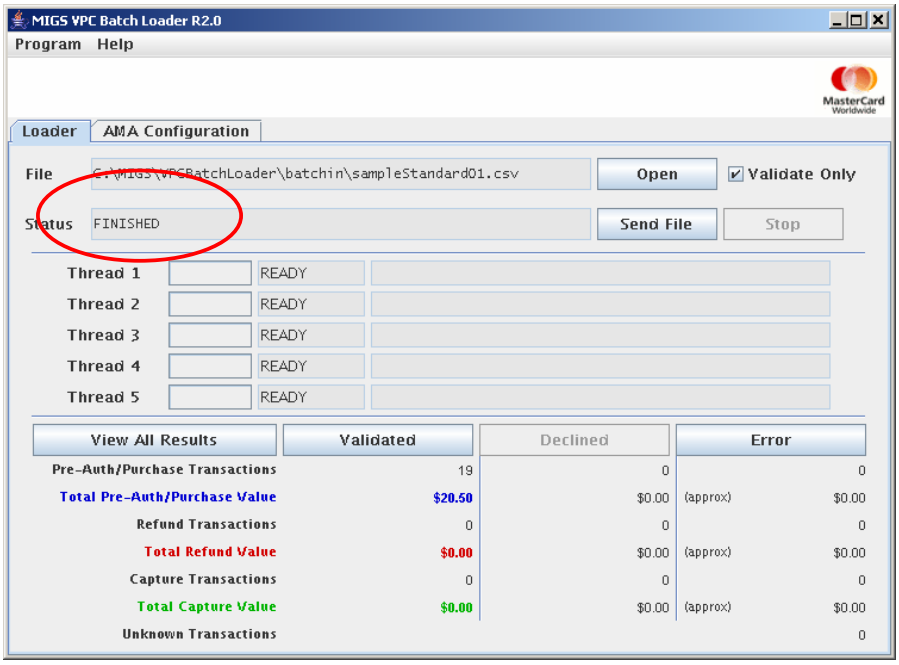

Figure 10 - "Validate Only" Cycle - Validation Finished

The **View All Results** button will display the validation status of all transactions contained in the input batch file. This includes all validated and error results (file.csv.test.all.csv).

The **Validated** button will display the validation status of all validated transactions (file.csv.test.app.csv).

The **Error** button will display the error transactions exactly as it appears in the input batch file (file.csv.test.err.csv).

Please refer to Appendix B and C for detailed information on result codes and result information.

The following is an example of the **.all.csv** file that is displayed when the **View All Results** button is pressed.

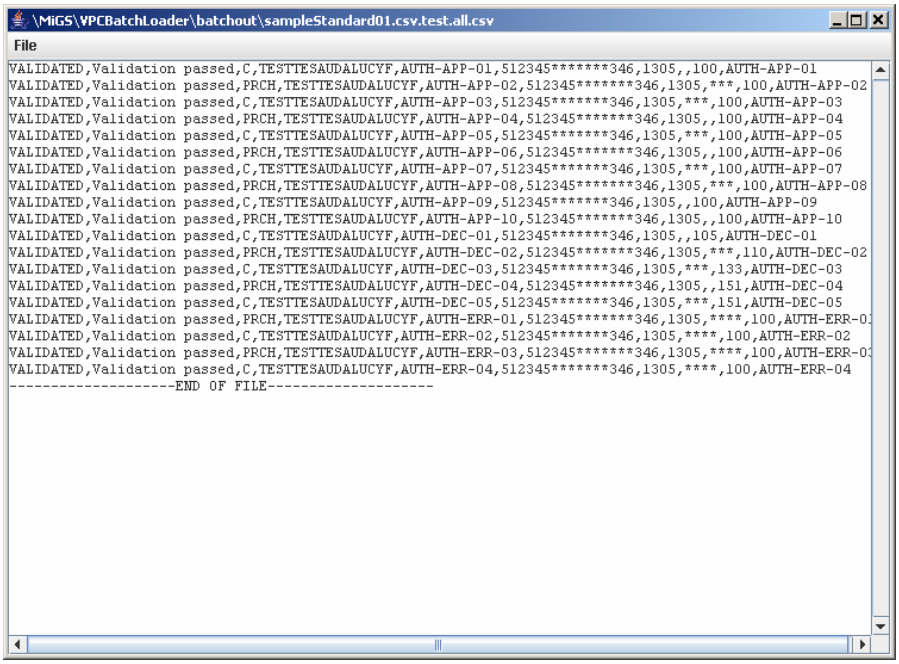

Figure 11 - "Validate Only" Cycle - View All Results

6. Amending the Input Batch File

The user should take note of any error transactions, and make any modifications necessary. Because this is the "Validate Only" cycle, the user may make modifications to the original input batch file.

The user is encouraged to validate the input batch file until the batch file is deemed fit for the "Processing" cycle.

To repeat the "Validate Only" cycle after making modifications, the user should ensure that the **Validate Only** option is selected, and click on the **Load** button to re-validate.

NOTE: the most common source of validation errors are fields that are too long / too short, or fields that contain invalid information (for example a card number failing MOD10 check).

The AMA Configuration Screen

If the input batch file contains transactions requiring “Advanced Merchant Administration” usernames and passwords, they can be configured in the “AMA Configuration” screen.

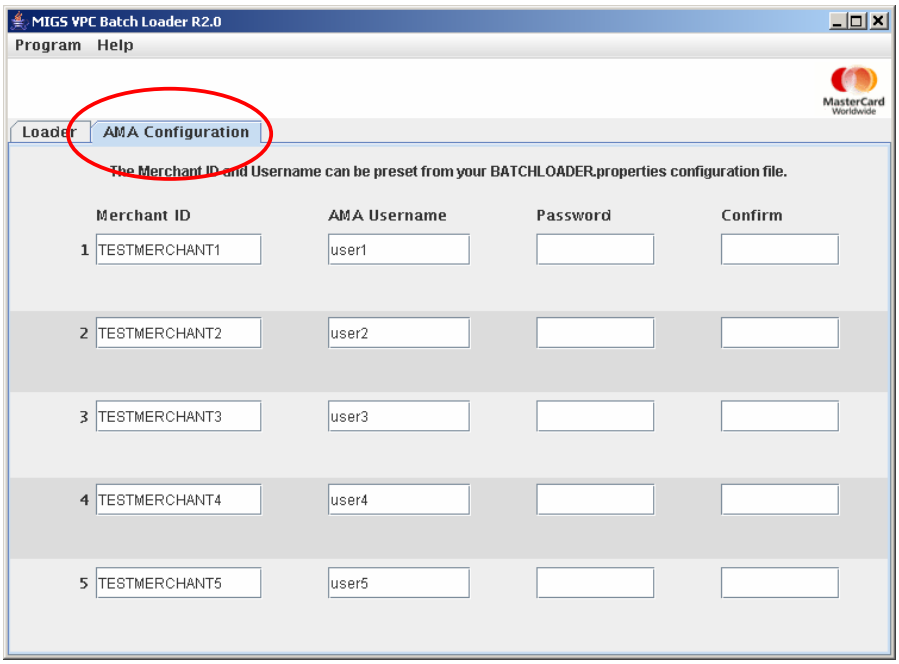

Figure 12 - AMA Configuration Screen

Up to five (5) AMA usernames/passwords can be configured.

Once the user has validated the batch file, they may begin the "Processing" cycle.

7. Ensuring that "Validate Only" is Cleared

To start the "Processing" cycle, ensure that the "Validate Only" checkbox is cleared as illustrated below.

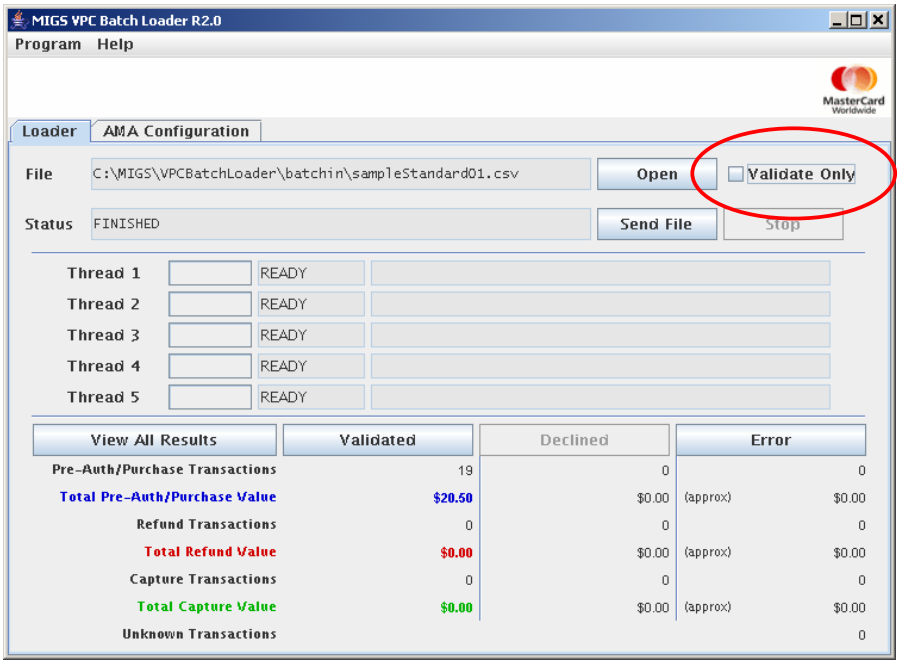

Figure 13 - "Processing" Cycle - Clearing the "Validate Only" Checkbox

NOTE: by clearing the "Validate Only" checkbox, transactions will be sent to the server when the "Load" button is pressed.

8. Starting the “Processing” Cycle

The processing can be started via the **Send File** button.

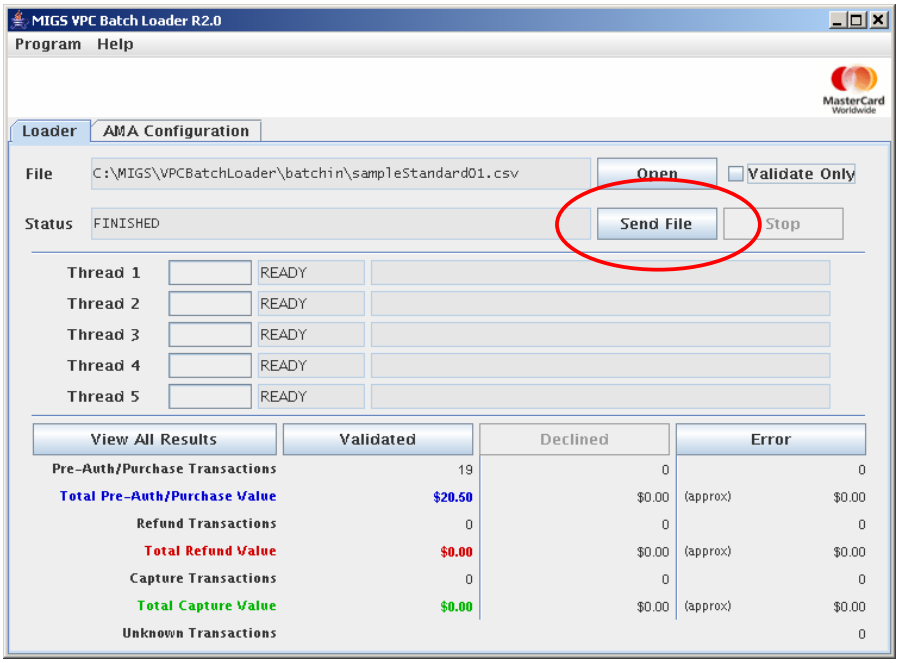

Figure 14 - “Processing” Cycle - Begin Processing

A confirmation popup for the start of the “Processing” cycle will appear. Click **Yes** to proceed or **No** to cancel processing.

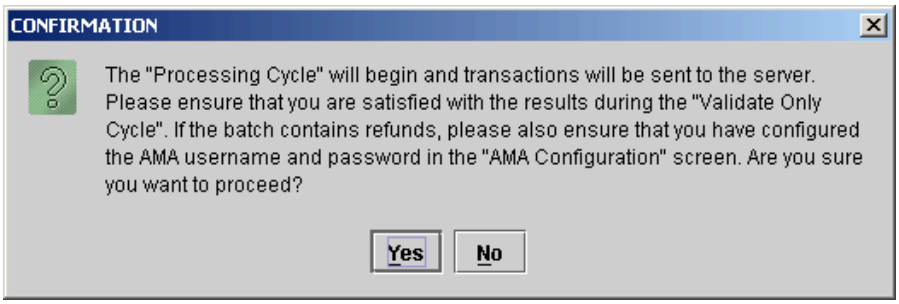
CONFIRMATION
The "Processing Cycle" will begin and transactions will be sent to the server. Please ensure that you are satisfied with the results during the "Validate Only Cycle". If the batch contains refunds, please also ensure that you have configured the AMA username and password in the "AMA Configuration" screen. Are you sure you want to proceed?
Yes
No

Figure 15 - “Processing Cycle” - Confirmation

9. Waiting for the “Processing” Cycle to Finish

Please wait while the application performs processing. The total time is dependent on the size of the batch file, the speed of the computer, the speed of the internet connection, and the authorisation time taken for each transaction.

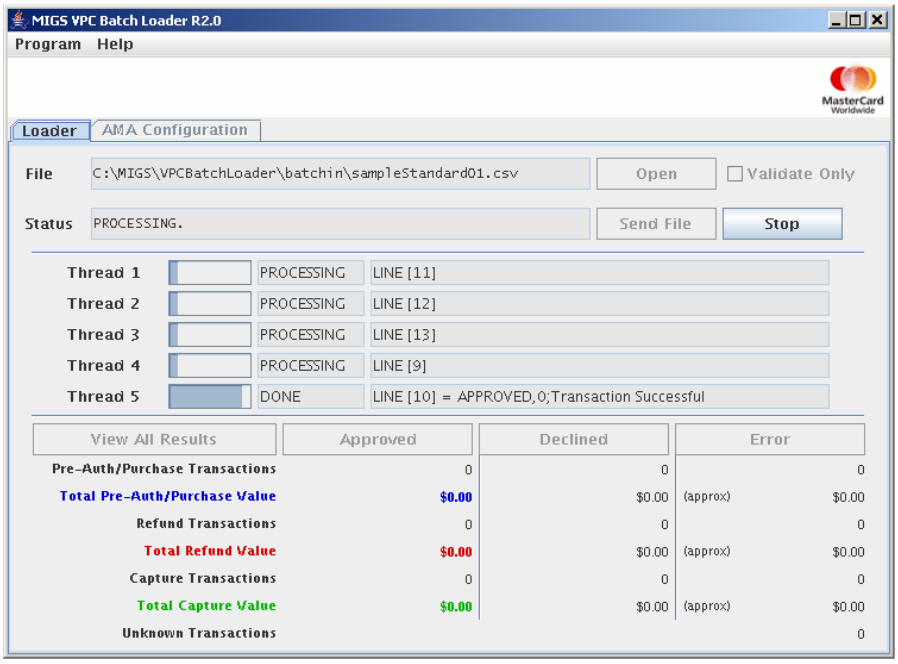

Figure 16 - “Processing” Cycle - Processing

The processing can be stopped via the **Stop** button, the **File -> Exit** menu item, or the **X** at the top right corner of the application. If the processing needs to be stopped, please wait patiently while the application finishes off transactions that have already been sent to the server.

NOTE: the application cannot be closed while a batch file is being processed. If the **File -> Exit** menu item, or the **X** is pressed while a batch is being processed, this will be equivalent to pressing the **Stop** button. To close the application press the **File -> Exit** menu item or the **X** while batch processing has finished or has stopped.

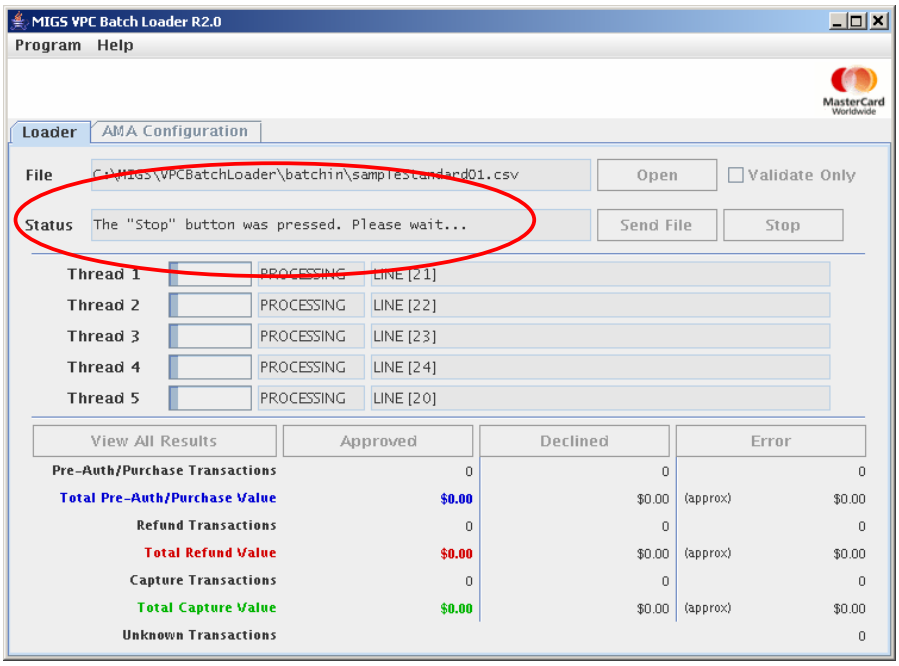

Figure 17 - "Processing" Cycle - Interrupting the Process

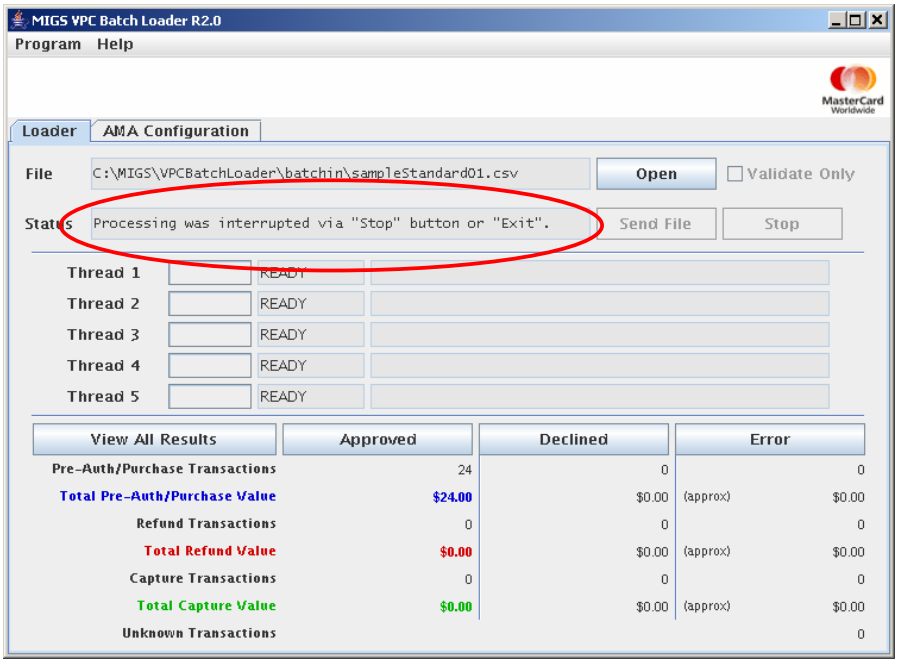

Figure 18 - "Processing" Cycle - Interrupted

10. Checking the Results from the “Processing” Cycle

Once the “Processing” cycle is complete, the application will display “FINISHED” in the “Status” field. Several results buttons will also be enabled.

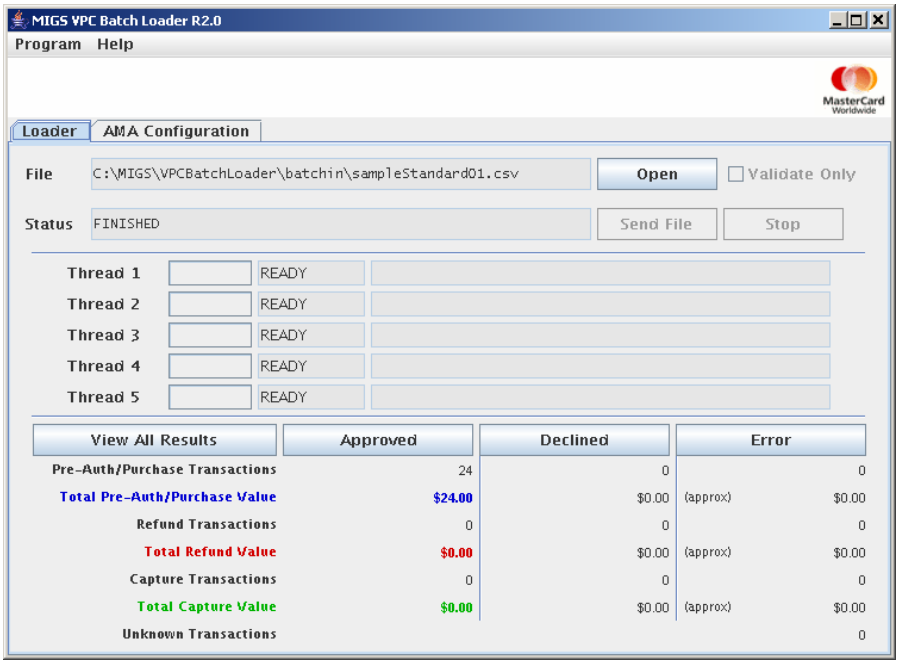

Figure 19 - "Processing" Cycle - Processing Finished

The **View All Results** button will display the results of all transactions. This includes all approved, declined, and error results (**file.csv.all.csv**).

The **Approved** button will display the results of all approved transactions (**file.csv.app.csv**).

The **Declined** button will display the declined transactions exactly as it appears in the input batch file (**file.csv.dec.csv**).

The **Error** button will display the error transactions exactly as it appears in the input batch file (**file.csv.err.csv**).

An extra state file (file.csv.state) contains the information on which lines of the input batch file has been processed. This file is for the internal use of the application only. **PLEASE DO NOT EDIT OR REMOVE THIS FILE**, this is especially important if the processing was stopped before it was finished, as this file allows the application to resume processing at the last unprocessed transaction.

Business Processes for Declined and Error Transactions

The declined (**file.csv.dec.csv**) and error (**file.csv.err.csv**) files contain transactions copied from the input batch file. The exact reason for the decline/error should be cross-checked with the results file (**file.csv.all.csv**) and a business decision be made whether to correct and re-process these transactions.

DO NOT MODIFY THESE FILES DIRECTLY – these files can be copied back into the input directory as a new batch file. Please rename it to a unique batch filename.

Refunding Transactions

The approved results file **file.csv.app.csv** contains the necessary information for processing refunds. **DO NOT MODIFY THIS FILE DIRECTLY** – this file can be copied back into the input directory as a new batch file. Please rename it to a unique batch filename.

The “TXNTYPE” field can be changed from a charge to a refund, while the “TRANSACTIONNO” can be used. All other irrelevant fields should be removed to conform to the refunds format (see Appendix C).

5 Advance Functions

This section contains information on the advanced functions and settings of the Batch Loader application.

Before users attempt to utilise these advance function they should have a good understanding of how the Batch Loader functions and the input/output formats.

Automating Batch Loader

- By starting the Batch Loader with **Load_Auto.exe** the Batch Loader will search through the batchin and process all files that starts with certain pattern (default is “Auto”).

  This pattern can be changed/defined in
  \BatchLoader\classes\BATCHLOADER.properties
  in the line
  INPUT_PATTERN=Auto

- Next is to add running Load_Auto.exe as a windows scheduled task, please navigate to:

  Start > All Programs > Accessory > System Tools > Scheduled Tasks

  - Click on Add Scheduled Task
  - Click on Next
  - Click on Browse
  - Browse to the Batch Loader folder and select Load_Auto.exe
  - Select desired frequency and time.

In the log directory there will be a log file called autotask.log which will have details on the automated tasks.

For example:

```
Wed Mar 15 17:40:45 EST 2006
ROOTDIR = C:\MiGS\BatchLoader
INPUT_DIRECTORY = C:\MiGS\BatchLoader\batchin
OUTPUT_DIRECTORY = C:\MiGS\BatchLoader\batchout
INPUT_PATTERN = Auto
VALIDATE_ONLY = false
Ready to process 1 input files
... Auto Processing
C:\MiGS\BatchLoader\batchin\Auto_sampleStandard01.csv
... done #0
Finished auto processing
```

Operating in the Background

The Batch Loader can be ran ***hidden*** automatically.

- Right click on Load_Auto.exe
- Select Properties
- In the “Target:” field, delete the word “show” at the end.

Next time the Batch Loader is ran from Load_Auto.exe it will start processing without showing its window.

Custom input directory

You can define your own input directory in
\BatchLoader\classes\BATCHLOADER.properties
by removing the # infront of the line
INPUT_DIRECTORY=C:\\MiGS\\BatchLoader\\MERCHANT_DEFINED

Recurring Payments

User may send an empty expiry date field if optional expiry date is activated.

For example, a purchase transaction line will be:

```
C,MERCHANTID,MERCHREF,5123456789012346,,123,500,ORDERINF
```

To activate the optional expiry date, users will have to open the "`BATCHLOADER.properties`" file in the classes folder; And uncomment the line: (take away the #)

```
#RECURPAY_CARDEXP=Optional
```

During validation, if no Exp Date is specified or it is all "spaces", it will pass validation. If the exp date has anything other than spaces, validation will still check for its formating as per non-recurring payments.

NOTE: The merchant account has to be setup by their bank to send “Recurring Transaction Subtype” **as default**, before they can utilise recurring payments. Please consult your bank.

Appendix A

BATCHLOADER.properties

Below is an example listing for the configuration file.

```
#############################################################################
#   Copyright 2007 MasterCard International
#   BATCHLOADER.properties - MiGS VPC BatchLoader Configuration File
#
#   Lines that are     prefixed with "#" are comments lines.
#   Lines that are NOT prefixed with "#" are settings lines.
#   Lines that appear more than once will take the value furthest down in file.
#############################################################################

#----------------------------------------------------------------------------
#   BATCHLOADER_ROOT
#   Must be set to the batch installation directory. Note that Windows
#   directories are separated by double backslash \\ and there is no trailing \\
#   ------------------------------------------------------------------------
#   Examples
#      BATCHLOADER_ROOT=\\MiGS\\BatchLoader
#----------------------------------------------------------------------------
BATCHLOADER_ROOT=\\MiGS\\VPCBatchLoader

#----------------------------------------------------------------------------
#   INPUT_DIRECTORY
#   User Defined Input Directory, default is "\\BatchLoader\\batchin"
#----------------------------------------------------------------------------
#INPUT_DIRECTORY=C:\\MiGS\\VPCBatchLoader\\MERCHANT_DEFINED

#----------------------------------------------------------------------------
#   RECURPAY_CARDEXP
```

```
#   Uncomment the line below and the batchloader will not check the existence
#   of the card expiry date. (For recurring payments)
#-------------------------------------------------------------------------------
#RECURPAY_CARDEXP=Optional

#-------------------------------------------------------------------------------
#   INPUT_PATTERN
#   Only batch filenames that starts with the defined INPUT_PATTERN will execute
#   when the BatchLoader is in Auto Mode.
#-------------------------------------------------------------------------------
INPUT_PATTERN=Auto

#-------------------------------------------------------------------------------
#   BATCHLOADER_DOFORMAT
#   Must be set to the input file format. Refer to documentation for details.
#   ---------------------------------------------------------------------------
#   Examples
#      BATCHLOADER_DOFORMAT=BATCHLINECUSTOM1
#      BATCHLOADER_DOFORMAT=BATCHLINESTANDARD
#-------------------------------------------------------------------------------
BATCHLOADER_DOFORMAT=BATCHLINESTANDARD
#BATCHLOADER_DOFORMAT=BATCHLINECUSTOM1

#-------------------------------------------------------------------------------
#   BATCHLOADER_CCMASK16
#   Masking format for 16 digit card numbers in the ".out.csv" results file
#   ---------------------------------------------------------------------------
#   Examples
#               (DEFAULT) Mask ALL digits
#      0.4      Show only the last 4 digits
#      6.3      Show only the first 6 and the last 3 digits
#      6.4      Show only the first 6 and the last 4 digits
#      NONE     No masking, display all digits
#-------------------------------------------------------------------------------
BATCHLOADER_CCMASK=6.3

#-------------------------------------------------------------------------------
```

```
#   AMA Username and Password Configuration
#   Preset the AMA merchant ID and usernames for refunds processing
#   ---------------------------------------------------------------------
#   Examples
#      BATCHLOADER_AMA_MERCHANT1_ID=TESTMERCHANT1
#      BATCHLOADER_AMA_MERCHANT1_USER=user1
#---------------------------------------------------------------------------
BATCHLOADER_AMA_MERCHANT1_ID=TESTMERCHANT1
BATCHLOADER_AMA_MERCHANT1_USER=user1
BATCHLOADER_AMA_MERCHANT1_PASS=password123
BATCHLOADER_AMA_MERCHANT2_ID=TESTMERCHANT2
BATCHLOADER_AMA_MERCHANT2_USER=user2
BATCHLOADER_AMA_MERCHANT3_ID=TESTMERCHANT3
BATCHLOADER_AMA_MERCHANT3_USER=user3
BATCHLOADER_AMA_MERCHANT4_ID=TESTMERCHANT4
BATCHLOADER_AMA_MERCHANT4_USER=user4
BATCHLOADER_AMA_MERCHANT5_ID=TESTMERCHANT5
BATCHLOADER_AMA_MERCHANT5_USER=user5

###########################################################################
#   THE FOLLOWING FIELDS MUST NOT BE CHANGED
###########################################################################

BATCHLOADER_ECHO=BATCHLOADER_ECHO
BATCHLOADER_NAME=MiGS VPC Batch Loader
BATCHLOADER_VERSION=R2.0

###########################################################################
#   UNUSED SETTINGS
###########################################################################
#BATCHLOADER_COMPILATION=WIN32

#--- LOGGING -------------------------------------------------------------
#--- WARNING: DO NOT CHANGE THESE VALUES AS THIS MAY LEAD TO LOGGING FAILURE.
log4j.rootCategory = DEBUG, MIGSAPPENDER
log4j.appender.MIGSAPPENDER=org.apache.log4j.ConsoleAppender
#log4j.appender.MIGSAPPENDER=org.apache.log4j.DailyRollingFileAppender
```

```
log4j.appender.MIGSAPPENDER.layout=org.apache.log4j.PatternLayout
log4j.appender.MIGSAPPENDER.layout.ConversionPattern=%d{yyyy-MM-dd HH:mm:ss.SSS} %-
5p %c{1} %m%n

#-------------------------------------------------------------------------------
#   TARGET URL
#   The VPC Batchloader no longer relies on the Payment Client to point to the
#   desired URL. This configuration defines where you are sending the batch
transactions
#-------------------------------------------------------------------------------
#MIGS.TARGETURL=https://migs.mastercard.com.au/vpcdps
MIGS.TARGETURL=https://migs-mtf.mastercard.com.au/vpcdps

#-------------------------------------------------------------------------------
#   ACCESSCODE
#   Every MerchantID will have their unique Access Code. It can be retrieved from
#   your Merchant Administration Portal.
#   ------------------------------------------------------------------------------
#   Examples
#      ACCESSCODE=A605VBD4
#-------------------------------------------------------------------------------
ACCESSCODE=F850D2AD
```

Appendix B

This section contains detailed information on RESULTCODEs displayed by the CommWeb Batch Loader application.

ERR-BATCHLOADER (BatchLoader Configuration Errors)

ERR-BATCHLOADER error messages typically depict configuration errors of the application. With the exception of L000 and L001, these errors will prevent the application from processing the batch file.

INFO	DESCRIPTION / RESOLUTION
B000	Could not find the Payment Client. Please check the "lax.class.path" setting in the Load.lax file, or check your CLASSPATH environment variable.
B001	BATCHLOADER.properties configuration problem
B002	A lock file indicates that the application is already running. Only one instance of the Batch Loader can run at any one time. The lock file may have been left behind by a previous crash. If you are 100% sure no other instances of the Batch Loader is running, you may remove the BATCHLOADER.lock file from the "log" directory and restart the application.
B003	Unable to create ".state" file. Please check that the files in "batchout" are not write-protected, and that you have read/write access to the "batchout" directory.
B004	There is a problem with the selected batch file. Please check that the file exists, and that you have read access to the file, and that it is a supported batch file type.
B005	There is a problem with the selected batch file. Please check that the file exists, and that you have read access to the file, and that it is a supported batch file type.
B006	Unable to create ".all.csv" file. Please check that the files in "batchout" are not write-protected, and that you have read/write access to the "batchout" directory.
B007	Unable to create ".app.csv" file. Please check that the files in "batchout" are not write-protected, and that you have read/write access to the "batchout" directory.
B008	Unable to create ".dec.csv" file. Please check that the files in "batchout" are not write-protected, and that you have read/write access to the "batchout" directory.
B009	Unable to create ".err.csv" file. Please check that the files in "batchout" are not write-protected, and that you have read/write access to the "batchout" directory.
L000	No AMA username specified for this merchant ID. This is returned in the RESULTCODE and RESULTINFO field during validation or processing. Please configure the appropriate MerchantID/username/password in the AMA Configuration screen.
L001	Invalid BATCHLOADER_DOFORMAT specified in the configuration file BATCHLOADER.properties. This is returned in the RESULTCODE and RESULTINFO field during validation or processing. Please ensure that a correct value has been configured, and close and restart the application.

ERR-RECORD (Batch File Record Errors)

ERR-RECORD error messages indicate formatting errors in a particular transaction line in the input batch file.

During the “Validate Only” cycle, validated transactions will be marked as “VALIDATED”, otherwise the suitable ERR-RECORD will be recorded.

During the “Processing” cycle, all transactions marked with ERR-RECORD will be stopped by the application and will not be sent to the server.

INFO	DESCRIPTION / RESOLUTION
R000	Blank line – indicates a blank line in the batch file.
R010	Input TXNTYPE is invalid. Check the error message for details.
R011	Input MERCHANTID is invalid. Check the error message for details.
R012	Input MERCHTXNREF is invalid. Check the error message for details.
R013	Input CARDNUM is invalid. Check the error message for details.
R014	Input CARDEXP is invalid. Check the error message for details.
R015	Input CARDCSC is invalid. Check the error message for details.
R016	Input AMOUNT is invalid. Check the error message for details.
R017	Input ORDERINFO is invalid. Check the error message for details.
R018	Input TRANSACTIONNO is invalid. Check the error message for details.

APPROVED / DECLINED

Transactions that have successfully reached the authorisation process will have a RESULTCODE of APPROVED or DECLINED.

RESULTCODE	DESCRIPTION
APPROVED	Transaction has gone through authorisation and has been approved.
DECLINED	Transaction has gone through authorisation and has been declined.

Appendix C

This section contains information on the input file formats supported by the Batch Loader application.

BATCHLINESTANDARD

The input file format is specified in the BATCHLOADER.properties configuration file. To use the "BATCHLINESTANDARD" file format, the following must be configured:

```
BATCHLOADER_DOFORMAT=BATCHLINESTANDARD
```

BATCHLINESTANDARD – Charge – Input Format

#	INPUT FIELD	REQUIRED	MIN CHARS	MAX CHARS	COMMENTS
1	TXNTYPE	Y	1	1	Must be "C" for MOTO transactions.
2	MERCHANTID	Y	1	16	Provided merchant ID.
3	MERCHTXNREF	N	~	40	Merchant generated unique reference.
4	CARDNUM	Y	13	19	Card number to be charged. BatchLoader will do MOD10 check.
5	CARDEXP	Y	4	4	Format YYMM. MM is checked to be <= 12.
6	CARDCSC	N	~	4	Card Security Code (CVC2/CVV2).
7	AMOUNT	Y	1	10	In CENTS (e.g. $1 = 100). Must not be <= 0.
8	ORDERINFO	Y	1	34	Merchant generated reference.

BATCHLINESTANDARD – Charge – Results Format

#	OUTPUT FIELD	COMMENTS
1	RESULTCODE	Result of the transaction.
2	RESULTINFO	Detailed information of the results.
3	TXNTYPE	same as input
4	MERCHANTID	same as input
5	MERCHTXNREF	same as input
6	CARDNUM	same as input (may be masked if configured).
7	CARDEXP	same as input
8	CARDCSC	always masked
9	AMOUNT	same as input
10	ORDERINFO	same as input
11	QSIRESPCODE	Receipt - QSI Response Code
12	QSIRESPCODEDESC	Receipt - QSI Response Code Description
13	AMOUNT	Receipt - Authorized Amount
14	RECEIPTNO	Receipt - Receipt Number
15	ACQRESPCODE	Receipt - Acquirer Response Code
16	AUTHORIZEID	Receipt - Authorization ID
17	BATCHNO	Receipt - Settlement Batch Number
18	TRANSACTIONNO	Receipt - Shopping Transaction No
19	CARDTYPE	Receipt - Recognized Card Type

*Note: error transactions (that are not sent to the server) may not contain receipt fields 11-19.

BATCHLINESTANDARD – Refund – Input Format

#	INPUT FIELD	REQUIRED	MIN CHARS	MAX CHARS	COMMENTS
1	TXNTYPE	Y	1	1	Must be “R” for refund transactions.
2	MERCHANTID	Y	1	16	Provided merchant ID.
3	MERCHTXNREF	N	~	40	Merchant generated unique reference.
4	TRANSACTIONNO	Y	1	19	Shopping Transaction No from a previous Charge transaction.
5	AMOUNT	Y	1	34	In CENTS (e.g. $1 = 100). Must not be <= 0.

BATCHLINESTANDARD – Refund – Output Format

#	OUTPUT FIELD	COMMENTS
1	RESULTCODE	Result of the transaction.
2	RESULTINFO	Detailed information of the results.
3	TXNTYPE	same as input
4	MERCHANTID	same as input
5	MERCHTXNREF	same as input
6	TRANSACTIONNO	same as input
7	AMOUNT	same as input
8	BLANK	blank field
9	BLANK	blank field
10	BLANK	blank field
11	QSIRESPCODE	Receipt - QSI Response Code
12	QSIRESPCODEDESC	Receipt - QSI Response Code Description
13	BLANK	blank field
14	RECEIPTNO	Receipt - Receipt Number
15	ACQRESPCODE	Receipt - Acquirer Response Code
16	AUTHORIZEID	Receipt - Authorization ID
17	BATCHNO	Receipt - Settlement Batch Number
18	TRANSACTIONNO	Receipt - Financial Transaction No
19	BLANK	blank field

*Note: error transactions (that are not sent to the server) may not contain receipt fields 11-19.

BATCHLINESTANDARD – Example

A sample batch file is supplied with the Batch Loader. The following is an example of the BATCHLINESTANDARD charge input format.

```
C,TESTTESAUDALUCYF,MERCHTXNREF-01,5123456789012346,0504,123,100,ORDERINFO-01
C,TESTTESAUDALUCYF,MERCHTXNREF-02, 4005550000000001,0504,1234,100,ORDERINFO-02
C,TESTTESAUDALUCYF,MERCHTXNREF-03,5123456789012346,0504,123,100,ORDERINFO-03
```